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DRY-ROT.

Dry-rot is a well-known disease affecting timber, to the destruction of its texture and the decomposition of its parts, and it is usually accompanied by the attachment of parasitic fungi, to the agency of which it has commonly been attributed. Those formidable vegetables are decidedly not the cause of unsoundness and of incipient decomposition in the first instance, although they may be admitted as an active agent in hastening the process and aggravating the degree of unsoundness in the second. Both observation and experiment show that fermentation always takes place in the dead vegetable destroyed, previously to the appearance of fungus, and that dry-rot often exhibits gigantic ravages without any show of fungi. But certainly where the decomposition is rapidly accelerated by damp accumulations and vitiated air, the process is very frequently attended with the apparently spontaneous vegetation of parasitical fungi, and this species of decay has received the appellation of dry-rot. Now, the rotting principle being moisture, the term is a misnomer; but it was applied to it in consequence of the attending peculiarity of the decomposed wood becoming a heap of dry dust, in fact, a dry friable mass, without fibrous tenacity. As to the popular theory of the spontaneous vitality of the fungi, the fact that nature suffers no fit recipient for animal or vegetable life to remain void, is the best reply. Their seeds, drawn from an unknown source, find an appropriate nidus in the fermented saccharine matter of the sap-wood. In the process of putrefaction, which is absolutely necessary for their germination and growth, carbonic acid gas and hydrogen gas are evolved in great abundance; and, as carbon and hydrogen are essential constituents in the pabulum of plants, whatever be the origin of their vitality, we here perceive the sustenance on which they flourish.

But though we may dispose of the spontaneous system *ex cathedrâ*, we own to its being a bit of a puzzler; and in denying that vegetation takes place, *sui generis*, from the juices of the timber, we are utterly unable to account for the inferred universal diffusion of the seeds of fungi. In this dilemma, we are forced to conclude that they are disseminated by the wind, and remain in a quiescent state until called into vegetable existence by favoring agents. On this head, a writer in the Quarterly Review has said: "The seeds of these parasites are so minute and multitudinous, and are supposed to be so widely floating about invisibly in the air, as to lodge upon every tree and plant above the surface of the soil. Fortunately, however, they seem to require the aid of putrefactive fermentation to enable them to germinate; were it otherwise, and but a ten-millionth part of them grew, our earth would be a world of mushroons." As it is, there remains an abundant crop; and a keen Linnæan might fill a pretty *hortus* with timber fungi of different sorts and sizes, from the large and leather-like *xylostroma giganteum* to all the minute varieties of the *mucor*, or seeming mould. The insidious cryptogamous enemies to the British navy are the several kinds of *boletus*, *agaricus*, *merulius*, and *polyporus*; but the most formidable of all is the *sporotrichum*, through all its species; for it throws up from its thallus a very forest of microscopic branches, loaded with reproductive spores, of such excessive smallness that they may insinuate themselves into the most minute crevices or flaws, even in the sides of the capillary tubes of which timber consists. Even the soft, hair-like *byssus-septica*, apparently yielding to the faintest breath of air, can embrace a gnarled timber, where, seeming to grow, like Monsieur Duquernier's polypus, at both ends at once, its insinuating radicles penetrate like minute wires into the substance, and, by destroying the cohesion of the fibres, accomplishes the decomposition of the wood.

Large masses of timber in combination are more subject to the deteriorating influences which accelerate decay than smaller ones, and, when forming the component parts of the structure of a ship, are subjected to many influences that have no analogies in other combinations of wood-work. An intelligent inquirer has pronounced that the first sign of dry-rot consists in the appearance of small white points, from which a filamentous substance radiates, parallel with the surface of the timber. This is the first stage of growth of the seeds of the fungus, and the filamentous matter is their thallus or spawn, which, gathering strength, insinuates itself into any crevice of the wood, and between the ducts of which the wood is organized, forcing them asunder, and completely destroying the cohesion of the tissue. When the thalli of many fungi interlace, the radiation can no longer be remarked; but a thick, tough, leathery, white stratum is formed wherever there is room for its development; and from this, a fresh supply of the destructive filamentous thallus is emitted, with such constantly-increasing rapidity and force, that the timber's total ruin speedily ensues, where circumstances are favorable for the growth of the fungi.

It has been proved experimentally that fluids which, in their ordinary state, will not produce fungi, generate them abundantly if ever so slightly acidulated. Dutrochet found that distilled water, holding in solution a small quantity of white of egg, will not generate fungi in a twelvemonth; but upon the addition of the minutest quantity of nitric, sulphuric, muriatic, oxalic, phosphoric, or acetic acids, it generated

them in eight days' time in abundance. Alkalescent infusions possess the same property.

The most active chemical agent in decomposing timber is the oxygen which it contains, and which, during the vitality of the tree, is held in harmless combination; but when the tree is felled, is set free, and immediately begins to act upon the woody fibre, inducing a slow combustion, the effect of which is the evolution of carbonic acid gas, and the carbonization of the wood, by which the tenacity and adhesiveness of its several parts are gradually destroyed, and a proper nidus and pabulum formed for the germination of fungi. The inappropriateness of the name *dry-rot* to such a disease is, therefore, palpable; and we can not but think the term proposed by Sir John Barrow, *sap-rot*, is far more eligible. By dry-rot, however, is meant that decay which is not only prematurely but unnaturally induced by the injudicious combination of destructive agents with the inorganic compounds of the timber, the effect of which is a complete decomposition of the vegetable fibre, and consequently a privation of all strength. Wet-rot is the natural decay to which timber, in common with all organized matter, is subject from the action of external instead of internal agents, and which may be either accelerated or retarded, according as destructive or preservative influences prevail. The distinction, if all causes are considered, is not so great as hath been held in our dockyards; and it has been found that dryness, cleanliness, and a free circulation of air, are the most efficient antidotes to both.

From causes which will be presently mentioned, the dry-rot has been viewed as a new disease, and therefore excited the greatest alarm for the welfare of the navy, which was considered to be in no small danger from so potent an oak-destroyer. Among others who decried the Linnæan pest was the redoubtable John Burridge; and thus he groaned—"The hand of fate hangs over our heads most irresistibly, and the dry-rot appears the invisible finger of Providence to destoy our navy, (like the walls of Jericho,) who may again have written those awful words, *mene, mene, tekel, upharsin!*" A writer in the tenth volume of the Quarterly Review, and a clever writer, too, in describing the evils we encountered in building large ships by contract in the late war, says: "The pent-up heat, acting upon the moisture, soon brings forth plentiful crops of mushroons; hence the origin of the *new* and *fashionable* disorder named dry-rot, unknown in former days in ships-of-war, but which has produced, in our own times, as many doctors and remedies as the fanciful diseases of the human body." This is not only rather in the dark as to the origin of the disorder, but absolutely at variance with the same work, and we verily believe with the same writer, in the thirtieth volume, where, in justly castigating the said John Burridge, and Joseph Hume, and Mr. Good, and Mr. Constantine Jennings, and Mr. Ogg, and Mr. Dodd, and other panacea-purveyors, it is stated: "We are fully persuaded of the correctness of the assertion of the Comptroller of the navy, made in the House of Commons, that at no former period had England a more efficient navy than at the present time, (1823;) and that now, for the first time in one hundred and fifty years, the dry-rot was effectually disappearing from his Majesty's ships of war; yet Messrs. Hume and Burridge call it a 'new disease'—they should have said an old disease with a new name, for it is at least as old as the Romans."

Now, we will step beyond the reviewer, and opine that dry-rot is nearly coeval with timber itself; nor can we believe that the Greek fleet remained ten years before Troy without requiring heavy repairs. Hesiod, having the fear of sap before his eyes, enjoins felling on the seventeenth day of the moon's age, because that luminary being then waning, the internal moisture would consequently be lessened: which precept of the ancient works and days is thus set to English verse by Tom Cooke, of the Dunciad legion:

> In the same day, and when the timber's good,
> Fell, for the bed-post and the ship, the wood.

From the Greeks, the custom would, of course, drop upon the Romans, among whom we find Theophrastus, Cato, Columella, Vitruvius, Palladius, and others, advising us not to think of applying the axe to any timber before autumn at soonest, and to leave oak till December, the veritable *tempestiva cæsura*, when, as the sage Emperor *Pogonatus* asserts, "the moon is under the earth." Pliny recommended the wane of the moon, when the wind favonius (*south*) was blowing. Vegetius tells us, that timber for constructing the Liburnæ should be felled from the 15th to the 23d day of the moon, lest it become worm-eaten and rotten within the year. The proper time, he says, for cutting wood for sea-service is after the summer solstice, that is, in the months of July and August, and from the autumnal equinox till the 1st of January, in which months the sap having done rising, the timber is consequently drier and harder. It should then, he adds, be seasoned before making it into boards, "for planks used green in ships shrink as they dry, and thereby occasion large and dangerous leaks: *Quod ars ipsa, et omnium architorum quotidianus usus edocuit.*" Even Julius Cæsar remarks, that though ships may be built of spring-felled timber, they will prove sluggish sailers. With such an illustrious prototype, it is hardly to be wondered at that Napoleon should renew the royal ordonnances to the conservators of the forests, which directed them to fell oaks only "in the wane of the moon," and "when the wind is at north;" a precept which we found still in observance among the wood cutters of Corsica; and he moreover directed, that "as ships built of timber felled at the moment of vegetation must be liable to rapid decay, and require immediate repairs, from the effect of the fermentation of the sap," the agents should abridge the time of felling naval timber, which was thenceforward to take place in the decrease of the moon, from the 1st of November to the 15th of March. But lessons of antiquity or experience have been equally despised by our omniscient Parliament; for in the first year of the British Solomon's reign, they forbade the cutting of oak except in the barking season, between the 1st day of April and the last of June. Thus sacrificing the carcass for the sake of the fleece!

Yet our earlier ancestors must have paid great attention to this object, or the fine carpentry of the roofs

of Westminster Hall, and King's Chapel at Cambridge, would not have descended to us in such matchless preservation. As to the piles driven into the Thames by Julius Cæsar, and those on which London bridge and the Savoy palace were built, we consider them rather as proofs of the antiseptic properties of water acting on wood entirely submersed in it, than cases in point. But the first accounts of our actual royal navy do but little credit to those who were entrusted with its care; for the "thorough repairs" and "rebuildings" sadly disfigure them. Though the word is not made use of in the Cottonian MS. of the thirteenth year of Henry the Eighth's reign, the rot must have been pretty troublesome; for we learn that "if the Great Henry be not housed over, in such wise that the same may be sufficiently defended from snow, rain, and sun, it shall be utterly destroyed within few years;" at which time the Sovereign and the Gabriel Royal required to be new made; others required to be caulked, "in all goodly haste, from the lowest to the highest, within the borde and without;" and, indeed, of thirteen goodly ships there was not a single vessel in a proper condition for service.

This must have drawn attention to the state of timber, and it would be palpable that if cut in the spring, when in a succulent state, it would be subject to rot. Hence some of their ships, being seasoned with greater care, ran a respectable time; and in Dr. Plot's discourse on the best time for felling timber, read to the Royal Society in 1691, he mentions the rebuilding of the Royal Sovereign, of 100 guns, forty-seven years after her launch at Woolwich; and he was told that all her ancient timber was still so hard that it was no easy matter to drive a nail into it. Now this paragon of her day, better known as the Sovereign of the Seas, was supposed by Pepys to have been built of winter-felled timber; she saw much service, and was in almost all the great engagements that were fought between England and Holland.* Dr. Plot is for the hibernal application of the axe in the forest, and is consequently indignant at the act of Parliament above-mentioned, thinking the sole reason for its enactment was, that the bark will then run. "To which I readily answer," he says, "that I fear the legislators that passed the making that act were ignorant that the bark might be taken off in the spring, and that the tree would notwithstanding live and flourish till the winter following. * * * The legislators, I say, were ignorant of this, otherwise they would never have made an act so pernicious to the whole kingdom as felling timber at this season is, for the sake of a few tanners."

Now, Dr. Plot's persevering cotemporary, Antony Van Leuwenhoeck, gives his opinion, that winter-felled timber is as full of juice as that cut down in spring; and that there is no difference between them, except in the bark and outermost ring of the wood, which in the summer are softer and so more easily pierced by the worm.

The question has excited considerable discussion, but ignorance and prejudice have been strongly aided by the interested; for though our shipwrights all agree that winter-felled timber is much harder, and more difficult to work, than that which is felled in the spring, it is not a little singular that the supply of such wood to our yards never amounted to one five-hundredth part of the timber delivered; at least, such is the demi-official statement of the Quarterly Reviewer. The Count de Buffon, by his experiments on oak, has incontestably proved, that by stripping the trees of their bark in the spring of the year, and letting them remain standing till they die, before they are felled, the wood will become more solid and strong, and probably more durable. But in whatever period of the year trees are cut down, some portion of matter will yet remain not converted into woody fibre, which it is of importance to expel; hence those hewn in winter, from their contracted pores, are less pervious to present and subsequent moisture: and they give much less trouble in seasoning than others which have been felled at an improper time, particularly if the supply of sap has been intercepted in the summer. The comparative weight of timber in a green and in a seasoned state, shows a difference often amounting to a third, or even more; thus, a cubic foot of English oak weighed 71 lbs. 10 oz. in its green state, and 43 lbs. 8 oz. in its seasoned. Now this speaks loudly for winter cutting, since the summer trees, having their ligneous vessels filled with sap and air, are of less specific gravity than when the mucilage, *succus communis*, tannin, and other natural juices have ebbed. But as there is a great difficulty in the terms *rising* and *falling* of sap, from the *whence* and the *whither* of the case, as well as whether it is added wood, or absent fluids, which make the difference; and as seamen may study this subject without being deeply versed in botany, we will give the dictum of a Coryphæus in that line, which they may receive as a postulate. Mr. T. A. Knight tells us, in the Philosophical Transactions for 1805, as follows:

"Few persons at all conversant with timber are ignorant that the alburnum or sap-wood* of trees, which are felled in the autumn or winter, is much superior in quality to that of other trees of the same species which are suffered to stand till the spring or summer; it is at once more firm and tenacious in its texture, and more durable. This superiority in winter-felled wood has been generally attributed to the absence of the sap at that season; but the appearance and qualities of the wood seem more justly to warrant the conclusion that some substance has been added to, instead of taken from it, and many circumstances induced me to suspect that this substance is generated and deposited within it in the preceding summer and autumn."

Although the rot of timber was not, till late years, a matter of public excitement, it caused great anxiety in our yards and arsenals; for its ravages, though comparatively inconsiderable with what they have of late been, were always serious and expensive. The present name of this disease appears to have been brought into use about the middle of the last century. Lord Sandwich, seeing the rapid decay of some fine

* Several writers have instanced this ship as a proof of the beneficial effects of winter-felled timber; but as Mr. Pett takes no notice of any such circumstance in the note given in Derrick's Memoirs, there can be no *proof* brought forward.

* Alburnum, blae, sap, and sap-wood, are synonymous terms among timber-men.

ships, ordered the Montagu, of 74 guns, to be built at Chatham, in 1779, *wholly* of winter-felled timber; and she did good service on various stations for upwards of forty years. In 1815 we had an opportunity of personally examining this ship, then commanded by the late Captain Peter Heywood, when her timbers, as far as they could be scrutinized, were sounder and cleaner than those of some of the new ships then riding with her in Tunis bay. The extraordinary durability of the Royal William is much better known than accounted for; but it seems that an order was given in 1688 for one hundred and fifty trees in Bushy Park to be stripped of their bark in the month of April, and left standing till December; and it is considered they might have been included in the Billy's frame. The Hawke sloop-of-war was a direct experiment of the kind. One half of her was built with timber barked while standing, and the other side with timber which had been felled at the usual time. The trees in this instance were excoriated in 1787, and not felled until the autumn of 1790. The ship was launched in 1793, and did very good service, but only ran ten years; and we are not aware that her particulars have been reported upon to the extent desired.

In the midst of such official inattention, a curious occurrence took place. The Achilles, of 60 guns, was built, by contract, in Barnard's yard, at Harwich, in 1757. Here the builder, voluntarily, and *unknown* to the navy board, used winter-felled timber in her; and when he was examined before a committee of the House of Commons, in 1771, upon matters touching ship-building, he declared that he had so done, and gave his opinion, "that the method observed in felling of timber should be by barking it in the spring, and not to fell it till the succeeding winter." The Achilles ran for some years as a crack ship of her class; and when she was docked, in December, 1770, it was observed that the timbers of the frame, both within and without board, where stuff had been taken off, were exceedingly sound. She was sold in the year 1784; and her place in the navy has been since assumed by a very notorious, ill-built, and wretchedly-fastened contract 74, L'Achille.

In discussing the age of ships, no conclusion will be of weight in which the station and services they have been upon are not duly considered. Thus, the Royal William is known to have passed ninety years of her time in port; and the Gladiator, 50, built in 1783, and broken up in 1817, was always a harbor-duty ship.

But although there are occasional instances of lengthened durability of some ships in the royal navy, the best average can only be taken at about fourteen years, and even this was considerably encroached upon by the late dry-rot ravages. If the age of the Montagu could be insured to our ships we should diminish the expense of the navy by one-half; while, if we could insure to them that of the Royal William, we should reduce the expense to one-sixth. The importance of conservation, therefore, has long been recognised, and, but for the enormous demand absolutely requiring immediate supply, would have been more attended to in every ramification. Still the intrusions of the principal evil, dry-rot, were watchfully scrutinized. In 1771, Lord Sandwich, after personally inspecting the incurable dry-rot condition of the Ardent, of 64 guns, encouraged the trial of the preventive nostrums recently brought forward as new inventions; and timber was pickled, stewed, boiled, charred, saturated, impregnated, and buried in mud, lime, sand, &c., and all without obtaining the desired end. Indeed, it must be confessed that many of the schemes afforded a plentiful display of ignorance, and Government incurred considerable expense in putting them into execution. At the close of the American war Mr. Nichols renewed the subject, in a sensible pamphlet on the quick decay of our ships of war. Shortly afterwards the Society for the Encouragement of Arts, Manufactures, and Commerce, offered a premium for discovering the cause and prevention of dry-rot; and, in 1795, a committee of that body inspected a method of cure by Mr. Batson, who had ventilated a diseased closet, cleaned it, and filled the interstices with anchorsmiths' ashes or ferruginous scales.

Men of sagacity soon inferred that to destroy the enemy it was necessary to cut off his supplies; but the most efficacious method of effecting this object was not so obvious. Various means of getting rid of the native juices by natural and artificial desiccation, by impregnation with foreign substances, and by immersion in earth or water, were resorted to. Oak was found to contain a much smaller proportion of oleaginous or resinous matter than many other kinds of wood; and, besides the lignic acid which it has in common with them, it contains particles peculiar to itself, called the gallic acid. Now, as the various sorts of timber will absorb that impregnating matter which has the greatest affinity to their native juices, it follows that oil, turpentine, or resin, are inapplicable to the monarch of the forest; being merely absorbed because they are moist, and refused if the patient has been previously saturated with water. On the contrary, if a solution of iron be applied to oak timber already saturated with water, the wood will still absorb the solution, not because it is moisture, but because it has an affinity with the metal itself. Indeed, metallic oxydes, being destructive to vegetation, must necessarily prove antidotes to the dry-rot; still, doubt may be entertained whether the preservative influence of any of them is not confined to destroying any vegetative principle which may exist near the surface. But we have seen enough to know that the solution of iron will arrest the dormant seeds of dry-rot within a timber, and preserve it sound for a great length of time, where the disease has not obtained so far as to decompose any of the wood. "In examining," says Mr. Gavin Inglis, "masses of oak dug from the alluvial strata of the country, where it has lain for ages, many of them are found fresh and sound as the day on which they had been thrown from their respective roots. In this case the timber is uniformly black as ebony, and obdurately hard. I was led from curiosity to examine chemically several of these old trunks, and found a far greater proportion of iron than could be supposed to exist in the natural state of the tree. To this iron I attribute the

incorruptibility and high state of preservation of this antediluvian timber. This extraneous iron must have been supplied from the ore of the soil or chalybeate waters; in this state of solution it would penetrate the substance of the wood, unite with the astringent principle, and produce not only the black color, but such a density of texture as almost to resist the sharpest instrument." Thus we see that artists are not the only class who ought to study nature.

Desiccation, or seasoning of timber by depriving it of its juices, either by air or heat, appears to be the simplest method of preventing the decomposition of vegetable matter. But mere desiccation is insufficient; for, although the *succus communis*, the aqueous particles, may be driven off, much saline, saccharine, and other matter remains, which is soluble in water; and it is not till these have been expelled, and replaced with substances which are insoluble in water, and not readily agitated by the change of temperature, that timber can resist those great agents, air and moisture. That wood which was best seasoned, and best taken care of, best countenanced the several nostrums recommended. Charring is an ancient mode of rapid desiccation; but, though an unquestionable preservative, it is a weakener of the material. While the workmen, in 1809, were excavating the reservoir for the Colchester water-works, a Roman pavement was discovered, beneath which was found some oak framing, almost perfectly sound, though it must have laid there above 1,000 years. This, on inspection, proved to have been previously charred.

Such was the state of our timber knowledge at the first revolutionary war with France. Experience has shown that dry-rot was both destructive and infectious; and we had arrived at the conclusion that the best means of preserving a ship from decay was in exact proportion to the powers we possessed of freeing its timber of natural moistures, and keeping them clean and dry afterwards. Under these convictions, where disease appeared, excision was largely and expensively practised; and in hard-up cases that desperate expedient called rebuilding was resorted to. In order to estimate the costliness of this precious operation to the public, we may come to the conclusion that if a new man-of-war's age be estimated at fourteen years, that of a recast ship will seldom equal seven years; and yet such repairs often amount to two-thirds of what a new one would cost. This is economy with a vengeance, especially as the old materials are worth at least one-sixth of their cost.

But a new and most alarming crisis arose, which made the very name of dry-rot a terror to the country. The exigencies of a most harassing war drove Lord Melville, in 1804, to have recourse to private builders for the necessary reinforcement of our navy, whose yards were mostly unprepared with proper materials for such extensive undertakings. Contracts were therefore entered into at advanced prices, the axe was set to work, and trees which were growing in the forest one year, were in the next floating on the ocean. Some idea of the enormous supply of wood required by the country may be formed on the demi-official statement of a quarterly reviewer, who only assumes half the ships of the navy to be in employ:

For the Royal navy, - - -	400,000 tons.
The East India Comp'y's service,	115,000 "
The Merchant service, - -	2,500,000 "
Buildings and internal demands, say, - - - - - -	1,000,000 "

This estimate of the consumption of timber may be compared with the contemporaneous report of the Commissioners of Woods and Forests; from which we extract the following paragraph in point:

It appears from authentic information and statements, which have been before us that the tonnage of the navy, in 1816, amounted 777,057 tons, which at one a half load to a ton, would have required to build the whole 1,164,685 loads; and taking the average duration of British-built ships to be fourteen years, the annual average quantity of timber requisite for such a navy, would be 83,149 loads, exclusive of repairs. The average annual quantity used, both in building, maintaining, or repairing the navy for eighteen years from the 1st January, 1789, to the 1st January, 1806, has been calculated at 85,202 loads; but the average quantity in the prizes taken during these eighteen years, exclusive of recaptures, had been 21,341 loads, which deducted from the whole number 85,202 loads, leaves 63,861 loads.

While official inquiry was directed to plan the constant supply of timber to this, and even an increasing amount, it was found that the dry-rot was affecting the navy, with a virulence hitherto unknown; especially among the newest and most recently repaired vessels, out of which that most notorious batch of line-of-battle ships, the Forty Thieves, was scandalously pre-eminent. The Queen Charlotte, a first rate, was launched at Deptford in 1810, sent round to Plymouth in 1811, found too rotten to be seaworthy, and was repaired at a cost of £30,000. She had been nearly seven years in building, but was put together with such heterogeneous materials that she displayed as many varieties of fungi as of wood. The Benbow, 74, was built in 1813; dry-rot infected her, and she was repaired at Portsmouth in 1818, without ever having been at sea, at an expense even surpassing that of the Queen Charlotte. The Ocean, the Foudrosyant, the Bulwark, the St. Domingo, the Ajax, the Albion, and other ships-of-the-line, were falling to pieces within five years after launching, and some of them in less than three. We ourselves happened to belong to one of the goodly "Forty," the Rodney, and there had our initiation into the mysteries of dry-rot; for after striving to be blind to the ravages going on in her frame, she was so torn and shaken by a gale off cape Sicie, in Januury, 1812, that Sir Edward Pellew was compelled to discharge her from his fleet, and thereby weaken it by an apparently efficient line-of-battle ship. Again, the Dublin, 74, was launched in February, 1812, put in commission the following August, and sent to cruise off the Western Islands in December. A very few weeks were enough for her, for she returned to Plymouth in January, 1813, in so deplorable a state that she was ordered to be paid off. Her repairs cost £20,000; but that was not the most serious part. The constant state of humidity had induced so much sickness among the crew, that she

was wholly inefficient for the country's service; and on her return to port, not fewer than one hundred and fifty of her men were sent to the hospital.

Great was the consternation, both at the Boards and throughout the Mateys, at such unexpected ravages among our most formidable ships; but the horrors inspired by the inroads of the dry-rot had the good effect of arousing such attention to the evil, that it is actually scotched, and rendered so effete, that we needly hardly regret being unable to kill it entirely. Before proceeding with the means by which it has been combated, we will show the vast sums which the nation has squandered for a dozen of those gallant 74 gun-ships, the "Forty Thieves;" and the reader may be assured that most of the batch is as bad.

Ships.	When built.	Service at sea previous to docki'g.	Cost of	
			Hull.	Repairs.
		yrs. mths.		
Illustrious, - -	1803	4 6	£37,592	£74,186
Eagle, - - -	1804	4 5	37,760	52,536
Swiftsure, - -	"	3 1	34,909	14,076
Marlborough, -	1807	3 0	61,326	29,394
Sultan, - - -	"	5 4	61,299	61,518
Elizabeth, - -	"	1 4	60,503	39,531
Egmont, - -	1810	2 3	57,438	29,747
Poictiers, - -	"	2 0	58,329	44,498
Stirling Castle,	1811	2 0	58,329	65,280
Edinburgh, -	"	2 0	58,329	52,476
Gloucester, -	"	2 0	58,329	43,268
Mulgrave, - -	1812	2 0	58,329	54,680

[*To be continued.*]

Navy of Holland.—The vessels in commission consist of nine frigates, six sloops, twelve brigs, twenty-five gun-boats, four Government steamers, and three store-ships, &c. Those not on active service are eight ships-of-the-line, three of which remain to be completed; twelve frigates, seven of which are in course of building; nine sloops, of which five are in progress; nine brigs, and sixty-eight gun boats. The entire naval force is therefore composed of eight ships-of-the-line, twenty-one frigates, fifteen sloops twenty-one brigs, ninety-three gun-boats, four steamers, and three smaller vessels: one hundred and sixty-five in all.

The number of seamen employed, inclusive of 687 officers, is 5687, besides 2998 civil servants, shipwrights, artificers, and laborers. The vote for the yearly expenses of the Naval Department, is 5,250,000 guilders; about £459,500, or $2,250,000. The largest vessels in the service carry eighty-four guns.

Navy of Denmark.—The fleet consists of six ships of the line, carrying eighty-four guns each, and one of sixty-six; besides the Phœnix, razee, used as a block-ship; one frigate of forty-eight guns, four of forty-six, and two of forty; one sloop of twenty-six, and three of twenty, each; one brig of sixteen, and four of twelve, two of which are stationed at the island of Santa Cruz; one schooner of eight guns, and two of six guns each; three cutters; twenty-nine mortar-galleys and boats; and forty-nine gun-boats, besides two on the stocks. Total of the fleet, one hundred and nine vessels, viz: seven of-the-line, seven frigates, four sloops, five brigs, three schooners, three cutters, and eighty mortar-galleys, (*bomb schalappen and jollen,*) and gun-boats.

Cannon Founderies in France.—Simultaneously with the restless activity with which the construction of the Parisian "zwingers," or forts detachés, is pushed, every exertion is making by the Government to provide the means of arming them. The founderies in the departments of the Niévre and Chavente have been directed not to lose a moment in casting pieces of the largest calibre. The foundery of Rualle, in particular, was never more busily employed, and the officer in command, a lieutenant colonel in the service, delivers two Paixhan's guns per week, independently of a quantity of cannon of various sizes. Scarce a day passes without some pieces being proved; and they have turned out of excellent workmanship. The detonation of the Paixhan's guns is tremendous. Such are the exertions making in the several founderies, that it is confidently expected the forts will be fully equipped by August next.

Fodder for French Cavalry.—M. Longchamp has lately submitted a proposal to the Minister for the War Department, in which he recommends trial to be made of a new species of food for horses, which, according to his estimate, will make a saving of nearly £470,000, and, at the same time, supply them with a far more nutritious food. He computes the whole number of cavalry and other horses on service at 80,000. M. Longchamp proposes to give them bread instead of oats; the bread to be composed of three parts of potatoes and one part of oatmeal. He assumes that each horse consumes ten pounds (French) of oats per day, at a cost of about six and a half pence or sixteen sous; in lieu of this, he recommends the allowance of the oats and potato bread to be the same weight, which will not cost more than two and a half pence or five sous; so that the saving will amount to four pence a day for each horse.

Fresh water from below the Ocean.—A curious experiment is now being made at the head of the chain pier, Brighton, that of raising fresh water from below the ocean by means of an Artesian well. It is intended to bore to the extent of seventy feet, when the chalk formation will, it is expected, be penetrated, and fresh water obtained, which will be applied to the formation of a *jet d'eau*. The attempt, if successful, will be a most interesting work of art and science, as well as a great acquisition to the pier.—*Sun.*

Military Tear and Wear.—The 66th, at present quartered in our barracks, was one of the regiments sent out to St. Helena, in charge of the Emperor Napoleon, and which remained there until his death It was three grenadiers of this regiment, with an equal number of those of the 20th, that carried the "immortal hero of a thousand fights" to his tomb. So rapid is the tear and wear of the army that there remain now in the 66th, only one captain, one sergeant, one corporal, and one drummer, who were present at the above memorable event, though only one year previous the oorps consisted of 1,200 rank and file, with its proportion of commissioned and non-commissioned officers.—*English paper.*

DIRECTIONS FOR APPROACHING THE WEST COAST OF SUMATRA.

BY AN EAST INDIA TRADER.

Vessels bound to the "Pepper Ports" on the west coast of Sumatra, that will fall in with the coast from October to May, ought not to keep *too* far to the eastward in crossing the trades, and in making the land; for in those months, after losing the trades in south latitude, from 7° to 10°, and longitude from 75 to 80 east, brisk west and northwest winds are met with, which will speedily carry vessels to the pepper ports to the northeastward; whereas vessels that have kept far east, say to 95°, and have fallen in with the land off the east end of Hog island and the Flat islands, have been becalmed many days, and made thirty days difference in their passages.

But in the months of June, July, August, September, and part of October, perhaps it would be best to make the land about the Flat islands, for during those months the southwest, south, and south-southeast winds blow nearly home to those islands.

The prevailing winds at the same time along the coast are from west-southwest to northwest, with dark, gloomy, squally weather at times; at other times the weather will be as fine for a week as it is in the opposite monsoon.

Vessels that are bound to the Northern Pepper Ports would do well to make the land about King's point, which is perfectly safe to approach, night or day, there being no shoals in the offing, (save a coral patch five miles southeast of King's point, with six fathoms least water on it,) and the shore bold to approach, having twenty-two fathoms three miles off, and twelve fathoms, gravel, within one mile. In coasting along this shore between King's point and Pulo Roozo I discovered no shoals whatever, except the six-fathom patch above mentioned.

The coast from King's point to Pulo Rooso trends about south; the shore bold to approach, and good anchorage all the way from ten to twenty-five fathoms, sand, mud, or gravel.

Pulo Rooso lies only half a mile from the main, between which prows sometimes pass. There is a rock that lies in mid-channel, on which the sea constantly breaks. Pulo Rooso may be known, when approaching it from the northward, by a single tall tree, that looks like a sail; it stands on the main land.

About one mile north of Pulo Rooso are a number of pyramidal rocks, with a passage between them and the main, for prows; and about two miles farther north is a similar cluster, and in a bay east of them is Siddo, the most northern pepper port on the coast. In 1838 they had only 400 peculs of pepper; you anchor in twelve fathoms, about one mile off shore.

In the month of March, at the new moon, we found light southerly winds, no land and sea breezes, and a current of two miles an hour, setting to the northward.

The next port southeastward is Diah, where there is a large river, and 2,000 peculs of pepper.

Barbar Wee and Barbar Nepah. These ports produce 5 or 6,000 peculs of good heavy pepper, and they are easy of access. [See Gillis's chart and directions.]

Pulo Riah produces 6,000 peculs of good heavy pepper; the landing good, and port healthy.

Patty, southeasterly of Pulo Riah a few leagues, produces 3,000 peculs of good pepper; the anchorage and landing good, and port healthy.

Sooko Gloom Pang, six miles southeasterly of Patty, produces 6,000 peculs of pepper; anchorage not good, landing fair, generally healthy.

Regus produces 7,000 peculs of pepper, and has an excellent harbor; but it is very unhealthy at this port, so vessels prefer to lay out in the outer harbor, though exposed to all winds.

Pangah produces 5,500 peculs of pepper. This port lies open to the sea, where, in the west monsoon, the anchorage and landing is dangerous on account of the heavy surf thrown on shore. Jungle fevers are very prevalent at this port.

Ojong Baboon is a small pepper port, where there is good landing, anchorage fair, but is also, like Pangah, unhealthy.

Analaboo is one of the oldest ports on the west coast, having a safe inner harbor for prows, and excellent landing. There is not more than 1,000 peculs of pepper to be had here, but fresh stock and vegetables are cheap and abundant. Considerable trade is carried on with vessels from Singapore, Penang, Chittagong, the Maldives, Acheen, and with China junks. They exchange gold dust for cloths, dried fish, fancy goods, and opium. They also pay in Spanish dollars for American sheetings and Turkey opium, powder and shot. The Government is good; and if you trade with the Rajah, you may trust him for a small amount. The inhabitants are Malays. It is unhealthy at this port in the west monsoon.

Senegang and Trang, situated three leagues from Analaboo, produce 5,000 peculs of pepper; they are unhealthy ports; anchorage and landing bad at all times.

Trepah, Tahdoo, Secamung, and Senahum are southeast of Trang, and are small pepper ports, situated on rivers, where the landing and anchorage is dangerous, and, like all the ports from Regus to Cape Felix, unhealthy.

Cape Felix terminates an extent of coast sixty-five miles from Regus, almost in a straight line southeast. No shoals whatever have been discovered along this coast. I have myself coasted it many times, by keeping between one and two miles of the shore. This coast has a monotonous appearance, being thickly wooded all along with tall arrow trees, and no high land at all to be seen. After rounding the cape, the land to Quallah Battoo trends due east seventeen miles, and has the same appearance as that above described. Between the cape and Quallah Battoo are the small villages of Se Mium, Lamah Tuah, and Samah Mudah, all situated on small rivers, and producing pepper, which is carried to Quallah Battoo, and sold to the merchants there. Vessels bound to Quallah Battoo from the northward, after rounding Cape Felix, keep close along shore instead of going round the shoals.

Quallah Battoo, once the second port on the coast, producing 24,000 peculs of pepper, but in 1838 it only produced 5 or 6,000 peculs of very inferior pepper. It has a large river, but the best landing place is the beach, abreast of the town; vessels trading at this port must be on their guard, for they will never forgive the chastening they got from the Potomac. The anchorage is safe in the westerly monsoon, and is not considered unhealthy.

Pulo Rio. This is a small pepper port, producing 1,500 peculs of pepper. It has a natural basin or harbor, narrow at the entrance, where there is water enough for ships of 1,000 tons. It is completely land-locked, and a vessel might heave down and repair with safety; but it is very unhealthy at this port.

Soosoo is one of the ancient settlements of this coast, and formerly produced several cargoes of pepper in a year, now it scarcely produces 1,000 peculs. The inhabitants are Malays, like those at Analaboo, and trade in the same manner. It abounds in rice, yams, pumpkins, molasses, and fowls; the landing and anchorage good, the place healthy.

San Callan, Tanga Tanga, Riah, and Thute, are small pepper villages, situated along the shore, between Looloo and North Tellowpow, producing about 3,000 peculs of pepper. The anchorage at those places is not good, and the inhabitants not to be trusted; they are Acheenese.

North Tellowpow—seven miles southeast of Soosoo, and one and a half northwest of Mingin—is a small port, with good landing; produces about 3,000 peculs of pepper.

Mingin is an ancient Acheenese town, once of some importance, now dwindled down to a fifth or sixth rate port, producing only 2,000 peculs of pepper. Several attemps have been made recently at this port to cut off American ships, without success. Vessels trading to this port must be on their guard. Anchorage and landing fair.

Labon Hadgie, eight miles southeast of Mingin, produces 3,500 peculs of good pepper, and is a desirable port to load at, for the natives are well disposed for trading, and are Malays. The landing and anchorage are good; it is also healthy. It is an ancient port, and considerable trade is carried on in opium, powder, and American sheetings.

Muckie, six miles southeast of Labon Hadgie, produces 10,000 peculs of good pepper, and the landing is good; it is an old port. The natives have always been treacherous; no dependence in any contract with the Rajah can be relied on. Pepper is always higher in price here than at other ports. It is a healthy port, and the anchorage fair, but open to all winds.

Labon Tarrock is dependent upon Muckie, and produces about 5,000 peculs of pepper; landing good. Allo Panko also belongs to Muckie.

South Tellowpow and Sowong produce 7,000 peculs of good pepper. Landing good, anchorage as safe as at any of the open ports along this coast; it is also an old port, and the natives not to be trusted. This is an excellent port to water at; it is considered the best on the whole coast. Fine cocoa nuts are to be had here; the place is healthy.

Samah Duah has 2,000 peculs of pepper. Landing bad; inhabitants knaves of the worst kind.

Eumadong is a small pepper port, but produces the finest pepper on the coast; formerly it produced 4,000 or 5,000 peculs, but the wars between Muckie and Tampatuan destroyed it several times; it was claimed by both towns. The anchorage is open, and the water deep close in shore. You anchor in twenty-five or thirty fathoms close in shore, the landing pretty good, and it is a healthy port.

Tampatuan, a romantic little town, situated at the bottom of a high hill that is remarkably conspicuous in the offing. It has a good harbor for two or three ships, where, in the west monsoon, they can lay sheltered from west and northwest gales. The inhabitants are Malays, and are the most civil of any on the coast. The boys come on board ship, and climb about like so many monkies. It produces only about 1,000 peculs of pepper; but considerable trade is carried on by the merchants in cloths, opium, powder, and rice. Many prows visit this port to trade, the harbor being safe for them. I visited this port four times in 1838, and weighed an old anchor of thirteen cwt. that had been lost many years; both buoy-rope and cable had rotted off. I afterwards lost the same anchor at Analaboo. Tampatuan is the southeast extremity of high land, situated between Soosoo and Tampatuan port. Between these extremes, the pepper is mostly high-land pepper, and is heavier and better than the low-land pepper. It is also much healthier at these ports than at the ports where the land is low. The coast extending from Tampatuan southeast to Ojong Monkie, a distance of thirty-five miles, is called the Clues coast, and is a gloomy, dangerous coast to anchor on in the west monsoon, being entirely void of shelter from any wind seaward; a heavy sea rolls in over the shoal ground, which extends a long distance seaward. Vessels must have good ground-tackle that anchor on this coast. It is also, like the coast between Regus and Cape Felix, unhealthy, and dangerous to land on; indeed, it is never done with ships' boats, and frequently we are capsized in the native "sanpans," that are built expressly for the surf.

The first port southeast of Tampatuan five or six miles, is Trabangun Riah, producing 3,000 peculs of pepper, and close to it, southeast, is Trabangun Thute, also producing 3,000 peculs of pepper. Landing dangerous at these ports, and it is very unhealthy. Jungle fevers prevail in the west monsoon.

Rahseahan is about four miles southeast of the last named ports, and produces 6,000 peculs of pepper. Anchorage and landing bad; at all seasons climate unhealthy.

Ahseahan is about five miles southeast from the above port, and produces more pepper than any other port on the island of Sumatra; in 1838, 18,000 peculs were exported. It has nothing to recommend it but pepper. You anchor in ten fathoms water, a mile and a half from the shore. During the west monsoon it is precarious riding, unless you have good ground tackling; and very dangerous landing, even in the

native boats; the climate is also very unhealthy. All kinds of fresh stock are scarce at this port.

Quallah Bahoo is three miles southeast of the above port, and is situated on a large river, barred at its entrance, and dangerous to enter at any time. The produce of this port is 4,000 peculs of pepper. Anchorage, landing, and climate the same as the ports mentioned above.

Quallah Tuah, next port southeast of the last-named, produces 3,000 peculs of pepper. Climate, anchorage, and landing the same.

Quallah Lemong, or Gunting Padang, is the next point southeast of the above-named, where there is 3,000 peculs of pepper. Anchorage, climate, and landing bad. This is the last port on this gloomy coast, called the Clues coast, extending from Tampatuan to Ojong Monkie, a distance of thirty-five miles, and, like the coast from Regus to Cape Felix, is clear of shoals; in the offing there are some shoals, but they have from six to ten fathoms of water upon them, and are seldom seen to break. Vessels may coast along in perfect safety, night or day, by keeping in shore, say about three miles from the land, or within one mile, where there will be from eight to ten fathoms water, sticky bottom. When the land wind blows, the noise of the surf can be heard six miles.

Ojong Monkie is the cape or point of land that terminates to the southeast what is called the Cluct coast. From this port the land trends to the eastward, forming a bay where there is a river and town called Baccoongong, where there is 2,000 peculs of pepper. Anchorage and landing safe, and climate healthier than at the ports on the Cluct coast.

Southeast of this port, four or five miles, are the Pulo Duas, forming a safe and convenient harbor for ships of any size, secure from all winds, where wood and water can be got easily, and where landing is perfectly safe. Buffaloes are to be had at a reasonable price, and it is as healthy as any port on the coast. You can enter the harbor either at the north or the south side of the islands. THIS PORT WOULD BE THE BEST OF ANY ON THE COAST FOR OUR MEN-OF-WAR TO REMAIN AT, IF EVER THERE SHOULD BE A SMALL SQUADRON STATIONED ON THE COAST.

On the 27th of May, 1838, while lying at anchor at Trabangung Thute, in the brig "Nabob," owned by Daniel P. Parker, Esq., of Boston, I experienced a heavy gale of wind from the westward, and finding our anchor dragging, I hove up and made sail, set two close-reefed topsails and foresail, and ran down the coast, went into Pulo Duas harbor, where I rode out the gale in safety with only one anchor.

Anchor at the Pulo Duas in fourteen fathoms water, with the following bearings: Great Pulo Duas, west; Little Pulo Duas, west by north half north; Troumon Isle, southeast half south; Gumpoong Anas, southwest half west; Reef, southwest by south. To sail into this harbor by passing between the islands, you may bring them to bear east, and steer for them on that bearing. All the shoals about these islands show themselves by breaking. About 1,000 peculs of good pepper exported from this port in 1838. Cocoa nuts abound on the islands, and are given to any one that wish for them; they are, however, not so good as those that grow on the main land. My crew made them their constant drink while we lay at these islands, and I thought them unwholesome, for one or two of my boatmen who were in the habit of drinking more of the milk than the rest of the crew broke out in sores. The natives said it was occasioned by drinking too much of the milk.

Sebadie, situated three or four miles south and east of the Duas, has about 1,000 peculs of pepper, of good quality. Here a ship will find good shelter from northwest gales, and good landing in ships' boats; good water and fine wood are easily procured, and buffaloes are abundant and cheap. It is as healthy at this port as at any port on the coast.

Southeast of Sebadie, a few miles, is Salecat, once a place of some trade; it now only produces 200 peculs of pepper, which is carried to Troumon for sale.

Troumon, remarkable for its sudden rise and fall. In 1825, Rajah Boujong (a usurper, called the Napoleon of Sumatra,) was the most powerful Rajah on the coast. He declared himself independent of the King of Acheen, and bid defiance to his power. His revenues were enormous for such a place; he put a duty of two dollars and a half upon every pecul of pepper exported, and the exports amounted to 40,000 peculs.

In 1827 he declared war with Quallah Battoo, and blockaded it with a ship of sixteen guns and one hundred men. He got possession of the fort on the right side of the river, but after blockading the fort for six months, was forced to retire; the ship being bored through and through with shot from the shore, in her last attack upon the forts and town. He also had several small brigs, that traded to Batavia, Padang, and Penang. He (so they say) left large sums of gold, silver, and jewels buried in the gound, a common practice of the Acheenese; and having died before he was ready to disclose the secret, no one knows of its whereabouts.

He was supposed to have been poisoned by one of his wives. His son was thirteen years of age and Rajah in 1838, and had married his first wife, a beautiful girl of the same age. Its exports of pepper are now dwindled down to 2000 peculs. But there are some rich merchants, and they trade in cloth, opium, and gunpowder, giving in exchange dollars, gold dust, and gum benjamin. The anchorage and landing are bad, but it is a healthy place, owing probably to the clearing away of the woods, for the land is the same as that on the Cluct and Analaboo coast, and from Troumon to Sinkel point, it has the same appearance; the whole distance of coast is lined with tall arrow trees.

Bullah Sumah is the last pepper port southeastward on the coast of Sumatra. It exports about 3,000 peculs; the anchorage dangerous in the west monsoon, landing is very bad, and the health of the place is also very bad, even among the natives, who die of jungle fever in the northwest monsoon. However, it is the reverse of the above, in regard to anchorage, landing, and health, in the southeast monsoon. The Rajah of this port is a good man to deal with.

Sinkel. In speaking of this port, I shall deviate from the preceding pages, which were written merely for my own amusement, and without the intention of any one ever seeing them but myself, thinking it would be presumptuous in me to give sailing directions, when Endicott and Gillis are so correct in their charts and directions; but Sinkel is beyond the limits, and as I have been there many times, a few instructions as to entering and leaving the port, anchorage, landing, &c., will not come amiss, I hope, to a stranger, if bound there.

Directions for sailing from Pulo Duas or Troumon to Sinkel, by the inner passage.—Steer out south-southeast from Duas and south from Troumon, so as to pass Pulah Lumah, (which may be known by the clearing of the land, cocoa nut trees, and smoke,) at a distance of five miles, and after bringing it to bear east, haul in shore at a distance of a half to one and a half miles or two miles. Keep within that distance all the way to Sinkel point, which will be easily known by its sudden bend eastward, and you will find a safe, easy, passage, clear of shoals, and anchorage all the way from twelve to seventeen fathoms, mud. I made the passage up and down the coast four times, and greatly prefer it to Passage Island passage. Being abreast of Sinkel point, keep out from the shore, after rounding it about two miles, as shoal water extends from a river, out about a mile, with three fathoms hard sand; sometimes the water is colored at some distance from the land, caused by the muddy water from the river. In passing this point and river you will probably shoal to five or six fathoms of water, and when you deepen to twelve or thirteen, and see the houses of Sinkel, haul directly up for them and anchor off the river's mouth, at one and a half or two miles distant, with Sinkel point bearing west by south, distance four miles, the river's mouth north; or you may anchor farther out, with the point bearing west.

In both situations you will have good anchorage, muddy bottom, and from ten to fourteen fathoms water, good holding ground, and secure from northwest gales.

This port is of very easy access, having only one shoal in the whole extent of the bay, between Sinkel point and Ojong common, and that not much, or any, in the way of vessels bound in or out; this shoal was unknown to traders and a Dutch frigate at that time surveying the coast, until I discovered it in the Nabob in 1838. The water is always muddy in this bay and sea smooth, which I suppose is the reason that the shoal had been so long undiscovered. It is about one quarter of a mile long and one eighth broad; its bottom, coral rock, and has thirteen fathoms all around it; the least water I found on it was twelve feet, no ripple or break on it. When on the centre of the shoal, Sinkel point bore west northwest; Ojong common, east half south; river's mouth, north by west; peak of Baniack, west half south; easternmost land in sight, east by south half south.

This port is unhealthy in the west monsoon. The Rajah is a brother of Boujongs, and the Rajah of Bulah Sumah. He deals fairly and honorably with Europeans or Americans. The principal exports from this port are benjamin, camphor, and wax, which are bartered for cloths, opium, gunpowder, and China goods.

Leaving Sinkel, bound to the southeast, steer out from the anchorage south, until you bring Ojong common to bear east northeast or east by north; keep from that cape or point, at a distance of two miles or more, for shoal water extends out a mile or more from that cape, and in passing it even at that distance you will probably shoal your water to seven or eight fathoms. After passing this cape of Ojong common, steer direct for the highest part of Mensular island, if it is clear so that you can see it; if not, then steer southeast by east, and keep in twenty or twenty-five fathoms water; steer on the above course until Pulo Lacotta is southwest of you; you may then haul in shore east, if bound to Tappoose, or Barroose. I have made the inner passage to Padang several times, at any time of the year. Norie's chart is very incorrect of the west coast of Sumatra, from Acheen to Padang.

If bound to Tappoose, haul in shore and coast along outside the shoals, and it will be known by a point which makes out with arrow trees on it; round this point as close as you please, there being deep water close to the rocks and breakers; then steer in northeast, and anchor within half a mile of the river, with it bearing northeast, the point southwest, five and a half fathoms water, mud. Wood, water, and fresh stock are to be had at this place, the landing safe, a shoal lies in this bay, but it always breaks. Its exports are the same as at Sinkel.

Barroose. Leaving Tappoose for Barroose, you can pass either side of the shoal close to; then you may steer for the south part of Pulo Carrang, and pass the point at half a mile distant; then haul in for Barroose, which will be then seen. You may anchor in seven fathoms, soft mud, about three miles off from the town. There is a long shoal of sand that runs parallel to the shore off Barroose for four miles, with breakers on its northwest end, and two or three fathoms on its extreme inside of the shoal; there is soft mud, but vessels always lay outside. Landing safe; exports the same as Sinkel and Tappoose; it is healthy at this port. Wood, water, and fresh provisions are to be had easily and in abundance.

Acheenese.	*English.*	*Malay.*
Quallah,	River,	Sungei.
Ojong,	Cape or Point,	Tanjong.
Riah,	Great or Large,	Besar.
Thute,	Small,	Reecheel.
	Mountain,	Gunung.
	Hill,	Busut.

ACHEEN.

Vessels bound to Acheen from the pepper ports can have their choice of three passages, viz: The Surat, Cedar, or Bengal passages. The first of these passages I passed through in the Nabob, bound to Acheen. The wind at the time of our getting under weigh was light and ahead; the tide, however, was in our favor, and we soon worked up to the narrows, where the wind freshened. The tide was so rapid our vessel became almost unmanageable, and with square yards,

with a brisk breeze, we passed through the narrows, stern first; there was about eight knots tide, which only extended a short distance from the narrows. The shores on each side are very bold; on the Sumatra side shelving under. We passed within forty fathoms of the rocks on that side, and thought at one time we were going directly on them, but an eddy took us and set us over into the middle of the passage. In returning from Penang, (1838,) I found the tide against me in the Surat passage; so I bore away and run down for the Cedar passage, and passed through it in about four hours. There is a shoal in the middle of this passage, on which the sea breaks sometimes; we saw it once only. Breakers also extended from the southwest point of Gomez, and on the opposite points, and I think I should prefer the Surat passage to this at any time; it is also a shorter cut. The Bengal passage is, I suppose, the safest of the three, but is much out of the way for vessels bound to Acheen.

Anchorage at Acheen.—The river at Acheen colors the waters to a considerable distance, and there is also shoal water opposite to the river's mouth, so that vessels ought not to anchor nearer than two miles from the shore in fifteen fathoms, sand and mud; nearer the shore it is hard sand. Our bearings were as follows: Flag staff, southeast by south; Pulo Way, north; Golden Mount, east southeast; Malora rock, northeast half north.

Acheen is the largest city on the west coast of Sumatra, and was first settled (so says their tradition) by Arabs, who were wrecked on the island of Pulo Way. There were only one hundred souls in all when they landed, but they soon conquered the timid and unwarlike inhabitants, the Malays, and established the Mahomedan religion among them, and Acheen became a rich and populous city. The King conquered the whole island and some others adjacent Such is the story that they tell. The present King resides at Acheen and at Telesemeway alternately. The nominal boundaries of the kingdom now extend from Diamond point to Tappoose, about four hundred miles; but many of the towns along the coast have shaken off his authority, and refuse to pay him tribute. The Dutch have also lately taken possession of Barroose, Tappoose, and Sinkel. There is to this day a marked difference in the aspect and bearing of the Acheenese, and the aborigines the Malays. The former are proud, haughty, insolent, fond of showy dress, and make a great display of side and fire-arms; they hate Christians, and the man that kills one is highly honored; they are jealous of their women, and fond of boys; they also speak the language of their fathers, the Arabs. The Malays are more civil in their connections with the Christians, more honest, and more industrious, and still retain their ancient customs and language, and, when they can, their religion; they hate the Acheenese. Acheen did by no means meet our expectations. We had heard so much at the pepper ports about Acheen, that we supposed it to be something magnificent; so we were disappointed when we found it just like other towns on the coast, only on a little larger scale. The houses are built on piles one story high, and thatched roofs, and are built of bamboos. We saw no temples, no palaces, or any thing to impress our minds that we were walking through the streets of the great Acheen. In walking through the bazas, however, I observed that they were all kept by young and handsome women; it is not so at the pepper ports—you can seldom see a young and handsome woman. There is said to be 8,000 families at this city, and the Acheenese say they have 80,000 inhabitants; but from what I saw I should greatly doubt it. The Acheenese say that their city was once much larger than it is at present, but the only things we saw about the city to substantiate its once powerful condition, was the ruins of a castle or fort, that might have been once formidable; but now the guns were lying half buried in the ground, and the ramparts tumbling and tumbled down, the ditches filled up, so that a file of soldiers would take it without trouble. We saw some beautifully manufactured brass guns fifteen feet long; these were evidently manufactured by themselves, as the ornamental work and unique shape testified; they were, I should think, 32-pounders. We also saw a mortar, length twelve feet; bore, two feet in diameter; and had on it the following inscription: "Thomas & Richard Pit, Bretheren, made this piece 1617;" also, the King's arms, and some defaced letters J. —— Rex.

The present King is a great opium smoker, drinks brandy and wine, and is fond of the other sex. He had with him a Dutch boy, who was cast away on the coast. One account says that the Malays mutinied, and took the vessel into Acheen, where they landed the specie and cargo, and burned the vessel; they killed the captain and officers. This lad was the son of the captain, by a Malay or Javan woman.

Wood, water, rice, vegetables of various kinds, fruits, bullocks or buffaloes, goats, ducks, and fowls, are to be had at this place at reasonable prices. The landing in the river good, and anchorage safe in both monsoons. Considerable trade is carried on with Bombay and Madras vessels. They import fish, cloths, and opium, and take in return gold dust, beetle nut, and benjamin, which is brought up by the prows from the coast. No pepper is exported from here.

Curious means of knowing the Position of a Ship in Foggy Weather.—There is a provision there (at Hollyhead) for the safety of the packets which attracted my attention, from never having known any thing of the kind in my life. The Stag Rock, on which the light-house is built, is connected with the main land by a chain bridge. I was surprized at the number of sea fowls upon the rock, and asked why they congregated in such numbers, and were regularly fed every day. The harbor-master told me that they were objects of his care and anxiety, for that when the packets in foggy weather could not make out any land, and finding by their lead they were close to the shore, they were in the habit of firing a gun, and at the report the sea fowl flew up screaming, and thus indicated the position of the packet instantly. I tried that experiment when I was there, and found it answer inimitably.—*Evidence of Capt. George Evans, R. N., before the Parliamentary Committee on Post Office Communication with Ireland, Session* 1842.

WASHINGTON.

THURSDAY, MARCH 30, 1843.

CIRCULAR OF THE BUREAU OF ORDNANCE AND HYDROGRAPHY.—Soon after the present bureau system first went into operation, a circular letter from the Bureau of Ordnance and Hydrography was addressed to the principal ship-owners and masters of merchantmen, inviting their correspondence, and requesting them to communicate to the bureau any nautical information, of which, in their foreign voyages, they might become possessed. Their attention was particularly called to the following subjects: Discoveries of islands, rocks, or dangers of any kind to navigation; shifting bars or shoals; errors of charts, whether from latitude or longitude, or other sources; tidal peculiarities; sailing directions for ports but little known, together with any information relating to the same, either as to their wants or resources; the force and set of currents; variation of the compass; latitude and longitude of icebergs, when out of their usual track or time; tracks of ships on remarkably short passages; limits of trade-winds at different seasons of the year, and of the gulf-stream at all times: together with any other information of a general character, relating to commerce or navigation.

From the superior skill and intelligence of our merchant captains, we may confidently expect, in reply to this circular, a rich fund of useful information. The article on a preceding page, containing "*Directions for approaching the western coast of Sumatra*," which is among its first fruits, is an earnest of this hope. All vessels, whether public or private, bound to the East Indies, will find the observations of Captain Putnam highly valuable. His sailing directions, and remarks on the "pepper ports," are the best that are any where to be found.

The information thus obtained, it is the object of the bureau to embody in a useful form, and render available to the sea-faring community generally.

EXAMINATION OF MEMPHIS (TENN.) HARBOR.—The Secretary of the Navy has appointed Captain LAWRENCE ROUSSEAU, Commander HENRY A. ADAMS, and Lieutenant STEPHEN JOHNSTON to make an examination and survey of the harbor of Memphis, Tennessee, as authorized by the act of Congress of the 3d instant, for the purpose of ascertaining the practica bility of establishing at that place a naval depot and yard for building and repairing steam-ships and other vessels of war.

These officers will meet at Memphis, on the 20th April, to commence their labors.

REVENUE CUTTER MORRIS.—The masters of several vessels gratefully acknowledge, in the Portland papers, the prompt and disinterested exertions of Capt. WALDEN, Lieut. GOODWIN, and the crew of the revenue cutter *Morris*, in affording them necessary assistance during the late gales.

NAVAL RUMORS.—No information has been received at the Navy Department to verify the rumor of a mutiny on board the *John Adams*, or of Lieut. BOYLE, first lieutenant on board the frigate *Congress*, having been shot by Capt. VOORHEES.

NAVAL CONSTRUCTORS.—On the 1st of May next the following changes, by transfer, in the stations of these officers will be made:

S. M. POOK, from Portsmouth, N. H., to Boston.
JOSIAH BARKER, from Boston to Portsmouth, N. H.
FOSTER RHODES, from New York to Norfolk.
FRANCIS GRICE, from Norfolk to New York.

The army and navy were not forgotten at the meetings of the various "Hibernian Societies" on St. Patrick's day. The following were among the numerous patriotic toasts:

AT SAVANNAH. *The Army and Navy of the United States.*—The wants of the nation require efficient establishments. Let not their spirit be paralized, their usefulness destroyed, by a false economy.

AT PHILADELPHIA. *The Army and Navy.*—Tried and true.

REVIEW OF THE THIRD INFANTRY.—The third infantry, under command of Col. Hitchcock, was reviewed at Fort Stansberry on the 15th inst., by Gen. Worth, in the presence of a number of the citizens of Tallahasse. The *Floridian*, speaking of the review, and of the location of Fort Stansberry, says:

"General Worth was highly pleased with the discipline and fine martial appearance of the command. Although but a short time since they have been called in from their several posts, and the first for a number of years that the command has been together, their appearance was highly creditable, and their evolutions performed in that strict military manner, which evinced to all that the officers understood their duty, and had been prompt and assiduous in the discharge of it.

"Fort Stansberry is a delightful and healthy location for a military post. The officers and their families are attentive, courteous, and hospitable, and the sumptuous entertainments in the mess-room, on the day of the review, gave satisfactory evidence that notwithstanding the troops might in long scouts on the frontier, sometimes got on short allowance, yet at a regular post, there was no failure of natures comforts; and would almost induce one to fall in love with a military life.

"The encampment surrounds a beautiful parade ground, of about twenty acres, situate in the piney woods, but recently cleared, yet not a vestage of tree or shrub remaining within the clearing order; cleanness and neatness prevails throughout.

"The regiment, we are informed, has been congregated at this post preparatory to their removal from the Territory.

"Gen. Worth and staff left in the evening for St. Marks, on his way for Cedar Keys and Tampa."

MARINE STEAM RAILWAY.—H. F. WILLIAMS, Esq., ship carpenter, has just finished his apparatus for hauling vessels on the railway, at his ship-yard, by steam. For the first time his new engine was tried on the 15th inst., on the steam-boat *St. Matthews*, which was drawn entirely out of the water in twenty-five minutes, using less than half the power of the engine. With the full power any vessel can be drawn on the ways, as far as will be necessary for repairs, in fifteen minutes.—*Savannah Republican.*

Extract of a letter from Lieut. Com'g O. BULLUS *to Commodore* CHARLES STEWART, *Commanding the Home Squadron, dated*

"U. S. BRIG BOXER,

"*Matanzas, Feb.* 24, 1843.

"On the 11th instant, being off Point Piedras, the land in sight to the northward, at 8 A. M., discovered a large Baltimore-built schooner, standing to the southward, under mainsail and jib. She appeared to be very neat in her rig, painted black, white waist, boats hoisted very high, a long pivot gun, and her decks full of men.

"My vessel having been disguised as much as possible, and her appearance altered to resemble a merchant vessel, I hoisted French colors, and she allowed me to approach her within two and a half to three miles, manœuvring evidently with a desire to reconnoitre us, but hoisting no colors. She then suddenly hauled her wind, at the same time hauling aft her fore sheet, and setting her fore-topsail and top-gallantsail. As we neared her on opposite tacks, I fired the long-nine at her, the shot falling under his counter, and made all sail in chase, tacking in his wake. The lightness of the wind enabled him to increase the distance between us. At noon it fell calm, when we commenced sweeping. At 2 P. M. we were coming up with him very fast, and had approached to within two miles; observed her, with the glass, at the sweeps, and wetting down sails; commenced firing with the nine-pounder. Unfortunately, a breeze at this time filled his sails; he squared away, running into shoal water, and finally disappearing behind the Keys to the northward of Point Piedras.

"Night coming on, and the current setting in upon a rocky shore, I was obliged to haul off to the southward and eastward, hauling up, towards day light, under the Isle of Pines. On the 12th, disappointed in not intercepting him, we stood along the land to the northward and westward; and, being off Cape Francis, we again got sight of the suspicious vessel, standing to the eastward, inside the Indian Keys. We made all exertion to reach him, and got the boats ready to send after him, but darkness again shut him in, and I ran in upon the bank to the southward of the St. Philip Keys, and anchored. On the 13th, sent the boats in to examine the bay, gain intelligence, and to procure a pilot, if possible, to take the vessel in, without, however, eliciting any information. On the 14th, having made up my mind that the schooner, from her perfect knowledge of the navigation, had been enabled to escape, and seeing no use in my remaining here any longer, I made sail to the westward.

"I regret to state, that, when about thirty miles to the northward of Havana, and during a heavy gale, I lost a valuable man overboard, a quarter-gunner, whose name was HOXIE BAXTER, a native of New York. I need not say that every exertion was made to save him; the sea was too heavy and irregular to permit his reaching the life-buoy or the numerous articles thrown overboard.

"We have no sick on board, and the vessel is in good condition."

LETTER FROM COMMANDER BUCHANAN TO THE SECRETARY OF THE NAVY.

U. S. SHIP VINCENNES,

Off Trinidad de Cuba, Feb. 24, 1843.

SIR: I have the honor to inform you of my arrival at this port from Santiago de Cuba, at which place I stopped for information, and to repair a leak in the bow of the ship, which kept the store-rooms and berth-deck afloat during all our passage to that port; the sick were put to serious inconvenience by it, and the continued dampness below increased the sick list daily, until it numbered thirty-one. I succeeded partially in repairing it; to have done so effectually would have occupied more time than I felt myself authorized to consume.

From thence I proceeded off the east end of the Isle of Pines to the Jardines, hove to under a reef, and despatched an expedition of three boats, with eight officers and forty men, under command of Lieutenant MITCHELL, accompanied by Lieutenant WAINWRIGHT and Purser BRYAN, in search of piratical vessels. Mr. BRYAN was a volunteer with the others for the service, and was sent in consequence of the sickness of Lieutenants HOOE and LEWIS, and Midshipman S. EDWARDS, one of the oldest midshipmen of the ship. The services of the other sea-officers on board I could not dispense with.

This expedition was provided with twenty days provision, and despatched to enable me to carry out strictly my instructions of the 20th ultimo from Commodore STEWART.

On the evening of the 19th instant, while standing in to the anchorage under Cayo Blanco, the entrance of the channel to this port, the pilot ran the ship on a bank in fifteen feet water. A boat was instantly sent to Trinidad for assistance, and every exertion made to relieve her from her dangerous situation, by carrying out anchors astern, and lightening her of her water, shot, wet provisions, heavy spars, and other articles, but all our efforts failed. As the wind commenced blowing hard from the westward, and the swell on the bar increasing, the ship thumped heavily for some hours. No assistance arriving from Trinidad, and feeling confident she could not survive many more such heavy shocks, I gave orders, as the last resort, to relieve her of her guns. While preparing to do so I discovered she floated forward, (having lightened her nearly a foot,) and as a heavy squall was then rising to the northward and westward, I determined to make the attempt to force her into deep water, under a heavy press of sail, having previously ascertained by sounding that we were in the shoalest water on the bank. With as little delay as possible the topsails and courses were set, our cables and hawsers astern slipped, and all hands sent on the bowsprit and jib-boom, which tipped her sufficiently to relieve her keel; the squall struck her, and in a few minutes she was safely anchored in four fathoms water, and, I am happy to say, without having sustained the slightest injury, and at this time is in perfect order for any service she may be called upon to perform. The only loss we met with is a few barrels of salt provisions, a small kedge, and some spare spars, and these I am yet in hopes of recovering. Our an-

chors, cables, hawsers, part of the provisions, and other articles which were thrown overboard, we recovered the following morning by the assistance of some lighters from the town, which I was compelled to employ, in consequence of the absence of our large boats on the expedition heretofore referred to, and for which an expense of about four hundred dollars was incurred.

Lieutenant MITCHELL, with the boats, has orders to join me at the expiration of ten days, off capes Corrientes or St. Antonio, unless circumstances should render it necessary to prolong his absence.

I enclose you a copy of a letter received from M. MAHON, Esq., U. S. consul at Santiago de Cuba, in reply to a communication made by me to him on my arrival at that port. The American citizens resident on this coast would be much gratified with the occasional visits of our vessels of war.

I am, with great respect, your obedient servant,

FRANKLIN BUCHANAN,
Commander.

MILITIA.

FLORIDA.—"An act to amend an act to organize and regulate the militia of the Territory of Florida," was passed by the Legislature of Florida, on the 11th inst., but returned, disapproved, by the Governor, on the ground that it did not remedy the inconveniences experienced under the act already in operation.

MASSACHUSETTS.—James F. Boyd, of Charleston, has been appointed adjutant general in the place of Henry A. S. Dearborn, removed.

HYDROGRAPHICAL OFFICE.

WEATHER JOURNAL FOR THE WEEK ENDING SATURDAY, MARCH 25, 1843.

Days.		Barometer.	THERMOMETERS. Attach.	Sun.	Rad.	Shade.	W. Bulb.	Dew Pt.	Weather.	Portion cloudy.	Winds.	Force.	Rain, inches.
Monday, 20th,	3 A. M.	29.860	56°	—	—	24°	20°	16°	Cum. stratus.	.4	N. W.	.13	
Do.	3 P. M.	29.848	56 5′	—	—	34 5′	30	14	"	.5	"	.13	
Tuesday, 21st,	3 A. M.	30.112	56 5	—	—	22	19	11	Cirrus stratus.	.10	Calm.	Calm.	
Do.	3 P. M.	30.044	58	—	—	40	32	14	Cumulus.	.8	S. W.	Airs.	
Wednesday, 22d,	3 A. M.	29.932	58	—	—	28	25	12	"	.8	West.	"	
Do.	3 P. M.	29.724	60	64°	64°	44	34	26	"	.3	W. S. W.	"	
Thursday, 23d,	3 A. M.	29.742	57	—	—	21	18	13	Cloudy.	1.5	N. W.	.52	
Do.	3 P. M.	29.876	56	58	54	22	50	—	Clear.	.00	"	.52	2.00
Friday, 24th,	3 A. M.	29.902	55	—	13	17	15	—	"	.00	"	Airs.	
Do.	3 P. M.	30.042	54	60	61	29	23	14	Cirrum.	.3	"	.30	
Saturday, 25th,	3 A. M.	30.024	56	—	—	22	19	15	Stratus.	.10	Calm.	Calm.	
Do.	3 P. M.	29.896	58	62	66	43 5	35	18	Cum. stratus.	.6	S. W	.52	

Maximum variation of the needle, March 20, at 20 h., Gottingen time, 1° 34′ 10″ 25.
Minimum, " " 23, at 2 h., " " 1° 26′ 04″ 75.
Mean daily variation for the week, " " " " 0° 06′ 48″ 22.

IMPRISONMENT OF AN AMERICAN OFFICER AT HAVANA.

The following article, which appeared during the last month in the New York Courier and Enquirer, is republished at the request of the author, "for the purpose of correcting any incorrect impressions which officers of the army or navy may have received on the subject:"

WEST POINT, (N. Y.,) *March* 18, 1843.

A young American officer, a graduate of West Point, was recently imprisoned at Havana for making a drawing of Moro Castle. Upon the interference of General CAMPBELL, our Consul, the young man was released. The Governor General politely told General Campbell that if the American Government desired a drawing of Moro Castle he would furnish one. "Thank you," said the General; "when the American Government needs a sketch of your castle, we shall draw it with our cannon."—*N. O. Tropic.*

Mr. EDITOR: The article copied from the New Orleans Tropic into the New York Courier and Enquirer of the 10th instant, on the imprisonment of an American at Havana for making a sketch of the Moro Castle is incorrect in regard to the language attributed to the American Consul. General CAMPBELL, as you have justly remarked, "is incapable of such rhodomontade." He is not only a gentleman of too refined and elevated a character to resort to such language in his official intercourse with other gentlemen, but, having been an officer of our army in 1812, he understands too well the habits and feelings of military men to suppose that such language could be used with effect upon the distinguished soldier, General VALDEZ, who is now the Governor General of Cuba.

As I am probably the person whose confinement has been referred to, I will take the liberty of requesting you to publish the following facts.

During a tour recently made in the West Indies, for the benefit of my health, I passed a few weeks at Havana, where I was gratified to find that our countrymen are looked upon as friends, and that the favorable disposition of our Government towards the existing state of things in Cuba is understood and appreciated by its authorities and people. I travelled about the city and adjoining country, in search of health and pleasure, without interference of any kind. And as I was aware that a regulation prohibited the making of maps or sketches without permission from the Government, I avoided a violation of it by not even attempting to sketch any of the beautiful scenes with which that island abounds. For convenience, I had traced a portion of the large published map of the city and its neighborhood upon a piece of paper, of convenient size, to be carried in the pocket; and, with this as a guide, I went to walk in the neighborhood of the Moro on the day before I expected to sail for the United States. My desire to see the place being heightened by the fact that one of my kinsmen had been with the New England troops who assisted the English in its siege and capture before the revolutionary war, I determined to see every thing which strangers could be permitted to see; and I accordingly went to the cor-

poral of the guard, and asked permission to walk into the covered way. After a little hesitation, the corporal seemed to assent: but, while I supposed he was exercising his politeness, he was, in fact, exercising his ingenuity, by conducting me circuitously into the interior of the Moro, where I found myself turned over to the officer of the guard.

It appeared afterwards that the corporal suspected me of having come in disguise from an English ship of war, which had anchored in the harbor the day before, and of being engaged in taking a plan of the Castle. I explained my character to the commanding officer, through a French interpreter, and took from my pocket the paper (which the corporal had not before seen) containing the portion of the public map which I had traced. I requested the commandant to compare it with the original, to satisfy himself that nothing had been added. But so strong is the jealousy against England, and the impression that she is preparing to seize the island, that he could not be convinced that the corporal's suspicions were untrue. I was accordingly sent, with an officer, to lay my case before the Governor General, at his palace in the city. But as he was unwell, and could not be seen, I was turned over to the officer of the city guard, to be kept until further orders. In this situation I must confess that my feelings were not of the most comfortable kind. I was aware that in this arbitrary Government, where the writ of habeas corpus does not always reach the unfortunate prisoner, the causes of imprisonment are frequently forgotten, while the prisoner continues without relief, and without the power of drawing attention to his case. However, on the following morning I wrote a note to the American Consul, which was kindly forwarded by the officer of the guard. The Consul visited me at the guard-room, and, after becoming acquainted with the facts, proceeded to the palace, where, with much difficulty, he obtained an interview with the sick Governor. The conversation which then ensued, as related to me by the Consul, contained nothing of the bullying character which was assigned to it by the Tropic. It was of a character entirely suited to the occasion. And although the Governor remarked that, "if our Government wished to obtain plans of the works about Havana, he would furnish some made by the best engineers," the declaration of the Consul that I was an American citizen was sufficient to obtain my immediate release.

The politeness of the Governor General and of the officers by whom I was arrested and detained was such as to give no ground for complaint. The arrest was made by mistake, but in obedience to a general regulation of the island. And the admission of our Consul to an audience with the Governor, under such circumstances, was probably a favor which none but the American Consul could have obtained.

The character of General CAMPBELL is such as to leave no doubt that the energy applied by him will always be equal to the occasion in hand. Indeed, I know that, on this occasion, he was prepared to make an energetic demand. But no language was required but that of politeness and respect.

Laws of the Last Session.

AN ACT to continue the office of Comissioner of Pensions.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the office of Commissioner of Pensions shall be, and same is hereby continued until the fourth of March, one thousand eight hundred and forty-six.

Sec. 2. *And be it further enacted*, That a Commissioner of Pensions shall be appointed by the President of the United States, and by and with the consent of the Senate, and that he shall execute, under the direction of the Secretary of War and the Secretary of the Navy, such duties in relation to the various pension laws as may be prescribed by the President: and also such duties in relation to the laws granting military bounty lands as may be assigned to him by the Secretary of War with the sanction of the President.

Sec. 3. *And be it further enacted*, That the said Commissioner shall receive an annual salary of two thousand five hundred dollars, and shall have the privilege of sending and receiving letters and packets by mail free of postage. [APPROVED, *Jan.* 20, 1843.]

AN ACT making appropriations for pensions for the half calendar year beginning the first day of January and ending the thirtieth day of June, one thousand eight hundred and forty-three; and for the fiscal year beginning the first day of July, one thousand eight hundred and forty-three, and ending the thirtieth day of June, one thousand eight hundred and forty-four.

Be it further enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the payment of pensions for the half calendar year beginning on the first day of January and ending on the thirtieth day of June, one thousand eight hundred and forty-three; and for the fiscal year beginning on the first day of July, one thousand eight hundred and forty-three, and ending on the thirtieth day of June, one thousand eight hundred and forty-four:

For invalid pensions for the said half calendar year, eighty-six thousand two hundred and forty dollars; and for the said fiscal year, one hundred and fifty-eight thousand four hundred dollars.

For revolutionary pensions under the act of the eighteenth March, one thousand eight hundred and eighteen, for the said half calendar year, seventeen thousand sixteen hundred dollars and for the said fiscal year, one hundred and ninety-two thousand dollars.

For pensions to widows and orphans, under the act of fourth of July, one thousand eight hundred and thirty-six, for the said half calendar year, four thousand five hundred dollars; and for the said fiscal year, two hundred and twenty thousand two hundred and fifty dollars.

For five years' pensions to widows, under the act of the seventh of July, one thousand eight hundred and thirty-eight, for the said half calendar year, ten thousand dollars; and for the said fiscal year, one hundred and twenty thousand dollars.

For arrearages prior to July, one thousand eight hundred and fifteen, payable through the Third Auditor, for the said half calendar year, one thousand dollars; and for the said fiscal year, two thousand dollars.

For arrearages and half-pay pensions, through the Second Auditor, for the said fiscal year, five hundred dollars.

For half pay pensions, payable through the Third Auditor, for the said fiscal year, three thousand dollars. [APPROVED, *February* 14, 1843.]

NAVY.

March. ORDERS.

22—Mid. J. J. Waddell, sloop Levant, Norfolk.
Carpenter J. A. Dickason, detached from St. Louis.

23—Lieut. Elisha Peck, detached from the command of the Lexington, and ordered to the New York yard.
Lieut. George M. Bache, order to Macedonian revoked.
Lieut. W. M. Glendy, command of store-ship Lexington.

24—Lieut. George M. Hooe, frigate Macedonian.
Capt. L. Rousseau, Comm'r H. A. Adams, and Lt. S. Johnston, examination and survey of Memphis harbor.

14—Purser G. C. Cooper, to discharge the duties of Purser of the Naval Asylum, Philadelphia, as well as the yard.
Master's Mate W. H. Burns, receiving-ship New York.
Boatswain J. Morris, det'd from Brandywine.
Boatswain Thos. G. Bell, frigate Brandywine.

27—Prof. J. T. Huston, receiving-ship, Boston.
Mid. Theodoric Lee, frigate Macedonian.
Boatswain W. Hart, det'd from ship St. Louis.

28—Midshipmen Wm. T. Burwell, Lyman R. Law, Dillaplaine R. Lambert, Wm. A. Murdaugh, Wingate Pilsbury, and A. H. Waring, frigate Macedonian.
Sailmaker J. Peed, sloop Falmouth, Pensacola.

Naval Intelligence.

Schooner *Wave*, now lying at Norfolk, to sail in a few days for Charleston, S. C., to exchange with the *Flirt*, which is to be employed as a packet to Chagres. List of officers: Lieut. Commandant John A. Davis, Lieut. Henry Eld, Jr., Act. Master Chas. E. Fleming, Asst. Surg. C. W. Tait, Pass. Mid. Jno. H. Parker and Hamilton F. Porter, Mid. Samuel B. Elliott, Captain's Clerk Mr. Bull.—*Norfolk Beacon.*

Ship-of-the-line *Delaware*, Com. Morris, was to sail from Rio Janeiro about the 10th of February, for the Mediterranean.

HOME SQUADRON.—Sloop *Marion*, Com. Armstrong, at Curacao on the 11th February. Had lost one man by dysentery, and some other cases on board. Officers and residue of crew well.

Schooner *Enterprise*, Lt. Com. Wilson, sailed from Buenos Ayres January 4.

PACIFIC SQUADRON.—Frigate *United States* arrived at Honolulu on the 5th December, and remained in port on the 7th, to sail next day for California.

EAST INDIA SQUADRON.—Sloop *St. Louis*, Com'r Cocke, dropped down from the Navy Yard to the anchorage on Saturday afternoon, 25th inst.—*Norfolk Herald.*

Marriages.

On Tuesday evening, in Norfolk, 14th inst., by the Rev. F. M. HUBBARD, Dr. JOHN A. GUION, late of the U. S. navy, to Miss SUSAN, daughter of JOHN M. ROBERTS, Esq., of Newbern, N. C.

At Christ Church, in Savannah, on Thursday morning, the 23d inst., by the Rev. EDWARD NEUFVILLE, Capt. EBENEZER S. SIBLEY, of the U. S. army, to MARIA HENRIETTA, youngest daughter of the late Judge CUYLER.

Death.

On board U. S. sloop of war Boston, Oct. 27th, JOHN OSBORNE, of Lubec, Me., captain of forecastle, aged 47; he was buried at Angier same day.

TREASURY DEPARTMENT,
Washington, March 16, 1843.

SEALED PROPOSALS will be received at this Department, until the 17th April next, for building the hulls of *one*, *two*, or *three* Iron Steamers, to be used as Revenue Cutters on the sea coast, of the following dimensions, say: "one hundred and forty (140) feet on deck, twenty-three (23) feet beam, and ten (10) feet hold. Model, drawings, and moulds for building to be furnished by the Department. It is expected that these boats will be built in reference to Hunter's or Ericsson's propellers. The iron used in construction must be American, and of the very best quality, and is to be painted with two good coats of red lead, one before the work is put up and the other after. The whole of said iron work shall be weighed after it is wrought and fitted to its appropriate place, and previous to its being finally put together. Payment will be made according to the nett weight per pound, including coal bunkers, water tanks, and galleys. The chain plates, bobstays, and all iron work necessary to the hull, spars, rigging, sails, and guns will be included in the proposal, and the price for such work will be separately stated; a spar deck of white pine 3 by 6 inches to be laid, secured from underneath with the wood screw bolts, caulked and planed; berth deck of ash or yellow pine 2½ by 6 inches, spiked and bolted to the berth deck beams; also, caulked and planed ceiling planks of white oak to the flooring heads 5 inches thick, thence yellow pine 4 inches thick to the lower deck clamp; all of which will be estimated by the square superficial feet.

The materials and weight used in the construction to be approved, and the work to be inspected by such officer as the Secretary of the Treasury may appoint, and the work to be done according to the direction of the superintendent.

The vessels to be completed within *six* months from the day of delivering the moulds and plans of building.

The workmanship to be inspected previous to delivery by two competent judges, one to be chosen by each of the parties of the contract, who, in the event of their disagreement, shall select a third, who are to determine whether the work has been executed in all respects according to the proposals and agreement.

J. C. SPENCER,
Secretary of the Treasury.

march 23—t17Ap

TREASURY DEPARTMENT,
Washington, March 17, 1843.

SEALED PROPOSALS will be received at this Department, until the 17th April next, for six Engines, Boilers, and Propellers, constructed upon the plan known as "Hunter's plan." Two of said Engines, Boilers, and Propellers to be delivered on Lake Erie, as designated by the Secretary of the Treasury, the others at such place or places on the sea coast as the Secretary may direct.

Also, two Engines, Boilers, and Propellers upon the plan known as "Ericsson's plan;" to be delivered at some place on the sea coast as the Secretary of the Treasury may direct. The engines, boilers and propellers to be made of the very best materials, to bear the *proof* and *inspection* of such person or persons as may be selected by the Secretary of the Treasury. The boilers to have not less than seven hundred [700] fire surface each, working pressure eighty [80] pounds to the square inch, proof two hundred and forty [240] pounds, six [6] eighteen [18] inch cylinders, with three [3] feet stroke. The whole to be delivered as directed, within five months from the time of receiving the drawings and plans for building. The proposals will state the price for which the Engines, Boilers, and Propellers will be delivered and put into complete operation. But as the application of the engines working to either of the said plans is a patent right, the proposals will also state the price asked, including the authority to use the patent right, and also the price exclusive of said authority.

J. C. SPENCER,
Secretary of the Treasury.

march 23—t17Ap

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